AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1   1.   (Currently Amended) A processor-based method for determining difficulty measures for

2   training cases used in developing a solution to a problem, comprising:

3   providing a set of training cases having respectively associated difficulty measures;

4   operating, by a processor, a candidate solution on a particular training case;

5   determining, by the processor, a performance measure of the candidate solution operating

6   on the particular training case;

7   determining, by the processor, a credibility rating of the candidate solution with respect

8   to the particular training case, the credibility rating indicating a degree to which the performance

9   measure is representative of the difficulty measure of the particular training case, wherein

10   determining the credibility rating of the candidate solution with respect to the particular training

11   case is based on inputs that exclude the performance measure of the candidate solution operating

12   on the particular training case; and

13   modifying, by the processor, the difficulty measure of the particular training case based

14   on the performance measure of the candidate solution operating on the particular training case

15   and the credibility rating of the candidate solution.

1   2.   (Currently Amended) The method of claim 1, wherein determining the credibility rating

2   comprises:

3   selecting one or more training cases other than the particular training case from the set of

4   training cases based on the difficulty measures of the one or more training cases;

5   determining performance measures of the candidate solution operating on each of the

6   selected one or more training cases; and

7   computing the credibility rating based on the performance measures of the candidate

8   solution operating on each of the selected one or more training cases that do not include the

9   particular training case.

1   3.   (Cancelled)

1   4.   (Original) The method of claim 1, wherein providing the set of training cases having

2   respectively associated difficulty measures comprises initializing a difficulty measure of each

3   training case in the set of training cases to a predetermined value.

1   5.   (Original) The method of claim 4, wherein the predetermined value is a maximum value.

1   6.   (Previously Presented) The method of claim 8, wherein:

2   providing the set of training cases comprises associating each training case in the set of

3   training cases with a target output;

4   operating the candidate solution on the particular training case comprises obtaining an

5   output from the candidate solution operating on the particular training case; and

6   determining the performance measure of the candidate solution operating on the

7   particular training case comprises comparing the candidate solution output to a target output of

8   the particular training case.

1   7.   (Original) The method of claim 6, wherein comparing the candidate solution output to

2   the target output of the particular training case comprises calculating a value corresponding to a

3   deviation between the candidate solution output and the target output of the particular training

4   case.

1   8.   (Original) The method of claim 1, wherein modifying the difficulty measure of the

2   particular training case comprises modifying the difficulty measure based on a weighted average

3   of the performance measure and a previous value of the difficulty measure.

1   9.   (Original) The method of claim 8, wherein a weight of the weighted average is based on

2   the credibility rating and a base learning rate.

1   10.   (Original) The method of claim 1, wherein modifying the difficulty measure comprises

2   maintaining the difficulty measure within a predetermined interval.

1   11. – 30. (Cancelled).

3

1   31.   (Previously Presented) The method of claim 8, wherein the performance measure of the

2   candidate solution operating on the particular training case is computed without including

3   training cases in the set other than the particular training case.

1   32.   (Currently Amended) A system comprising:

2   an input section to provide a set of training cases and a candidate solution, wherein the

3   training cases in the set are respectively associated with difficulty measures; and

4   a processor to:

5   operate a candidate solution on a particular one of the training cases;

6   determine a performance measure of the candidate solution operating on the

7   particular training case;

8   determine a credibility rating of the candidate solution with respect to the

9   particular training case, the credibility rating indicating a degree to which the performance

10   measure is representative of the difficulty measure of the particular training case, wherein the

11   credibility rating of the candidate solution with respect to the particular training case is

12   determined based on inputs that exclude the performance measure of the candidate solution

13   operating on the particular training case; and

14   modify the difficulty measure of the particular training case based on the

15   performance measure of the candidate solution operating on the particular training case and the

16   credibility rating of the candidate solution.

1   33.   (Currently Amended) The system of claim 32, wherein the credibility rating is

2   determined by:

3   selecting one or more training cases other than the particular training case from the set of

4   training cases based on the difficulty measures of the one or more training cases;

5   determining performance measures of the candidate solution operating on each of the

6   selected one or more training cases; and

7   computing the credibility rating based on the performance measures of the candidate

8   solution operating on each of the selected one or more training cases that do not include the

9   particular training case.

1   34.   (Cancelled)

1   35.   (Previously Presented) The system of claim 32, wherein the difficulty measure of the

2   particular training case is modified based on a weighted average of the performance measure and

3   a previous value of the difficulty measure.

1   36.   (Previously Presented) The system of claim 35, wherein:

2   each training case in the set of training cases is associated with a target output;

3   the candidate solution operating on the particular training case obtains an output; and

4   the performance measure of the candidate solution operating on the particular training

5   cases is determined by comparing the candidate solution output to a target output of the

6   particular training case.

1   37.   (Previously Presented) The system of claim 36, wherein the candidate solution output is

2   compared to the target output of the particular training case by calculating a value corresponding

3   to a deviation between the candidate solution output and the target output of the particular

4   training case.

1   38.   (Previously Presented) The system of claim 35, wherein a weight of the weighted average

2   is based on the credibility rating and a base learning rate.

1   39.   (Previously Presented) The system of claim 32, wherein the performance measure of the

2   candidate solution operating on the particular training case is computed without including

3   training cases in the set other than the particular training case.

1   40.   (New) The method of claim 1, wherein the training cases represent corresponding

2   sections of a maze, wherein the performance measure of the candidate solution operating on the

3   particular training case is based on an amount of time for the candidate solution to navigate the

4   section of the maze corresponding to the particular training case, and wherein determining the

5   credibility rating is based on an amount of time that the candidate solution takes to solve another

6   maze.

1   41.   (New) The method of claim 40, wherein the another maze is a randomly-generated maze.

1   42.   (New) The system of claim 32, wherein the training cases represent corresponding

2   sections of a maze, wherein the performance measure of the candidate solution operating on the

3   particular training case is based on an amount of time for the candidate solution to navigate the

4   section of the maze corresponding to the particular training case, and wherein the credibility

5   rating is determined based on an amount of time that the candidate solution takes to solve

6   another maze.

1   43.   (New) The system of claim 42, wherein the another maze is a randomly-generated maze.

1   44.   (New) The method of claim 1, wherein the training cases represent corresponding

2   subtasks of a task, wherein the performance measure of the candidate solution operating on the

3   particular training case is based on a measure characterizing a performance of the candidate

4   solution when performing the subtask corresponding to the particular training case, and wherein

5   determining the credibility rating is based on a measure characterizing a performance of the

6   candidate solution when performing another task.

1   45.   (New) The system of claim 32, wherein the training cases represent corresponding

2   subtasks of a task, wherein the performance measure of the candidate solution operating on the

3   particular training case is based on a measure characterizing a performance of the candidate

4   solution when performing the subtask corresponding to the particular training case, and wherein

5   determining the credibility rating is based on a measure characterizing a performance of the

6   candidate solution when performing another task.